Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block \_\_\_\_\_\_\_

**Energy in the Ecosystem Web Quests**

1. **Go to** [**http://www.zephyrus.co.uk/foodpuzzlechain.html**](http://www.zephyrus.co.uk/foodpuzzlechain.html) **and complete the food chain “quiz”. Make sure to answer these questions as you go. (In other words, all of these questions can be answered by the information found as you work through this quiz)**
2. Green plants make their own food, so they are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. What is a predator?
4. What is an example of a producer that fish could eat?
5. What is the general term for organisms that live in soil and fallen leaves on the forest floor?
6. What is one example of them?
7. **Go to** [**http://www.sciencebob.com/lab/q-web-chain.html**](http://www.sciencebob.com/lab/q-web-chain.html) **and answer this question:**

What is the difference between a food chain and a food web?

1. **Go to** [**http://www.dunkirkcsd.org/cms/lib/NY19000564/Centricity/Domain/293/Food\_Web\_Two.jpg**](http://www.dunkirkcsd.org/cms/lib/NY19000564/Centricity/Domain/293/Food_Web_Two.jpg)  **and answer these questions.**
2. List the organism(s) that are producers.
3. List the organism(s) that are consumers.
4. Draw three food chains found within this food web.
5. How many different food chains can you find in the food web pictured?
6. What is missing from this food web?
7. **Go to** [**http://www.crickweb.co.uk/ks2science.html#**](http://www.crickweb.co.uk/ks2science.html) **to answer these questions. After reading through the introductory page, click on the next button in the upper left-hand corner.**
8. Select River Habitat: Write out the food chain.
9. Select Woodland Habitat: Write down the food chain.
10. Select Seashore Habitat: Write down the food chain.
11. **Go to** [**http://oceancolor.gsfc.nasa.gov/SeaWiFS/TEACHERS/sanctuary\_4.html**](http://oceancolor.gsfc.nasa.gov/SeaWiFS/TEACHERS/sanctuary_4.html) **and answer the following question.**

Why are phytoplanktons so important to the marine (water) ecosystem?

1. **Go to** [**http://allthesea.blogspot.com/2011/03/differences-between-phytoplankton-and.html**](http://allthesea.blogspot.com/2011/03/differences-between-phytoplankton-and.html) **and answer the following question.**

What is the difference between phytoplankton and zooplankton?

1. **Go to** [**http://www.vtaide.com/png/foodchains.htm**](http://www.vtaide.com/png/foodchains.htm) **to answer these questions.**
2. In any ecosystem, there are fewer carnivores than herbivores. Why? (your answer needs to specifically include a description of how energy is transferred)
3. Why would it be extremely rare to find a food chain with nine links in it?
4. **Go to** [**http://chemistry.elmhurst.edu/vchembook/321foodenergy.html**](http://chemistry.elmhurst.edu/vchembook/321foodenergy.html) **to answer these questions.**
5. As energy passes to a higher tropic level, approximately \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the useful energy is lost.
6. What is the benefit to a society if everyone reduces the amount of meat they eat? (use the concepts discussed with energy in the ecosystem to answer this question)
7. **Go to** [**http://www.vtaide.com/png/foodchains.htm**](http://www.vtaide.com/png/foodchains.htm) **and scroll down until you find the “create a food web” link. Click on the link and follow the directions on the page. After you create your food web, draw your food web on a white sheet of printer paper and attach it to this paper.**

**Extra Credit**

1. **Go to** [**http://www.seafriends.org.nz/enviro/soil/depend.htm**](http://www.seafriends.org.nz/enviro/soil/depend.htm) **and browse the whole website. There are many controversial tidbits there, so take your time to understand what they are trying to say. After reading each section, write a question that you still have even after reading the side**.
2. History:
3. Concern:
4. Food requirements:
5. Meat or Vegetarian:
6. Why need soil:
7. Sustainability:
8. Overall, what do you think about the message(s) found in this website?